

**REMARKS**

As a preliminary matter, Applicant again requests that the Examiner acknowledge receipt of Priority Document No. 11-201667, which was submitted to the PTO on July 14, 2000.

Claims 1-23 are all the claims pending in the application. Claims 1-23 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ishikawa et al. (U.S. Patent No. 5,926,292), hereinafter referred to as Ishikawa, in view of Silverstein et al. (U.S. Patent No. 6,166,800), hereinafter referred to as Silverstein.

With respect to independent claims 1 and 10, the Examiner maintains substantially the same reasons for rejecting these claims as set forth in the Office Action dated April 22, 2002, except the Examiner now admits that "Ishikawa does not teach displaying a monochromatic image having a higher gradation resolution than production performance of each of RGB cells." *See page 2 of Office Action.* However, the Examiner now alleges that Silverstein teaches a color image capture system (20) with respect to color signals at each pixel, and that Silverstein teaches that a high resolution monochrome image can be acquired by operating the color separation elements (44, 144). *See pages 2-3 of Office Action.*

In response, with respect to independent claims 1 and 10, Applicant maintains the arguments set forth in the previous Amendment arguing the distinguishable aspects of claims 1 and 10 over Ishikawa, and further submits that one skilled in the art would not have been motivated to combine Ishikawa with Silverstein, to arrive at Applicant's invention, as recited in claims 1 and 10. That is, as set forth in the Amendment of October 22, 2002, the pallet encode circuits of Ishikawa are only for the purpose of converting an input color image of 24 bits into a 9-bit color image, but do not involve displaying a monochromatic image on a color display

device. Further, Ishikawa relates to memory reduction, in that Ishikawa converts more image data information to less data information. *See col. 10, lines 1-2 of Ishikawa.* Yet further, Ishikawa accepts the reduction of resolution in favor of reduced storage capacity. *See col. 5, lines 39-47 of Ishikawa.*

On the other hand, the Examiner alleges that Silverstein teaches that a high resolution monochrome image can be acquired by operating the color separation elements in which cells are operated in order to acquire an accurate monochrome image. Thus, one skilled in the art would not have been motivated to combine Ishikawa with Silverstein for at least two reasons: 1) Ishikawa only teaches converting an input color image into another color image, while, on the other hand, Silverstein desires to obtain an accurate monochrome image; 2) Ishikawa seeks to reduce resolution in an effort to reduce storage capacity, whereas, on the other hand, Silverstein seeks to obtain a high resolution image. Furthermore, at least based on the foregoing, it is apparent that Ishikawa teaches away from the teachings of Silverstein. Therefore, at least based on the above-stated reasons, Applicant respectfully requests that the Examiner withdraw the § 103(a) rejections of claims 1 and 10 over Ishikawa in view of Silverstein, and indicate that these claims are allowed.

Additionally, Applicant notes that even if, *assuming arguendo*, the references can be combined, the resulting monochromatic image would not result in one having a higher gradation resolution than the RGB cells. In this regard, Applicant observes that Silverstein describes operating the color cells in field states simultaneously. *See col. 8, lines 39-41.* While this may provide a high luminance, this would not necessarily affect the gradation resolution. As a

Applicant's invention describes an increased gradation resolution. Therefore, for at least these reasons, Applicant submits that claim 1 is patentably distinguishable over the applied references.

Further, with respect to claim 10, this claim describes input of a monochromatic image to a color display by allotment. To the extent Silverstein teaches a monochromatic image, it relates to the output data rather than the input data. Therefore, for at least this reason, Applicant submits that claim 10 is patentably distinguishable over the applied references.

Applicant submits that claims 2-9 and 11-23 are patentable at least by virtue of their respective dependencies from claims 1 and 10.

Further, with respect to dependent claims 4 and 11, the Examiner states a new rationale for rejecting these claims, as set forth on page 3 of the Office Action. However, the Examiner still does not specifically show that the applied references disclose each and every claimed feature of claims 4 and 11, respectively. That is, as also previously argued in the October 22 Amendment, the Examiner's statement does not show a correspondence between minimum and maximum values of input data and minimum and maximum luminance values. Therefore, for at least this reason, Applicant submits that claims 4 and 11 are patentable over the applied references.

Similarly, with respect to claims 12-16 and 19-20, the Examiner fails to even mention the limitations of the invention recited in these claims. In fact, it was pointed in the October 22 Amendment that the Examiner did not even discuss the limitations of these claims in the April 22 Office Action, and the Examiner still has not completely addressed these claims. Thus, at least based on these reasons, Applicant submits that claims 12-16 and 19-20 are patentably

Office Action, and the Examiner still has not completely addressed these claims. Thus, at least based on these reasons, Applicant submits that claims 12-16 and 19-20 are patentably distinguishable over the applied references and requests that the Examiner withdraw the § 103 rejections of these claims, as the Examiner has not demonstrated that each and every limitation is either taught or suggested by Ishikawa and Silverstein, either alone or in combination.

Yet further, with respect to claims 9 and 16<sup>1</sup>, these claims describe time divided processing to produce or process the monochromatic image. The processing is performed independently for each cell. Silverstein teaches simultaneous, not independent, processing of the cells to obtain a monochrome image. To the extent cells are processed in Ishikawa, they are with respect to a color image.

Finally, with respect to dependent claims 7-9, 14, and 15, Applicant maintains the arguments set forth in the October 22 Amendment and submits that the Examiner has failed to respond to those arguments. Accordingly, Applicant requests that the Examiner withdraw the rejections of claims 7-9, 14, and 15 under § 103.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

---

<sup>1</sup> Claims 9 and 16 are amended, as indicated herein, for clarification purposes.

Amendment Under 37 C.F.R. § 1.111  
U.S. Application No. 09/617,308

Q58739

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Diallo T. Crenshaw  
Registration No. P-52,778

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Date: March 31, 2003